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Biomedical, Energy, Space Research Attract Budget Cutters

President Ford's request for a \$4.6-billion cut this year in federal spending is an exercise in make believe, since it comes at a time when he is said to have shifted to the view that recession is a greater menace than inflation, and that the economy now needs to be boosted rather than throttled. In addition, Congress is not in a cutting mood.

Nevertheless, an immense amount of 'round-the-clock government staff work went into preparation of the jettison list, and, therefore, it provides some illumination on orders of priority within the bureaucracy. Announced just a few weeks before the budget for the fiscal 1976 is to be delivered to the printers, the proposed reductions also contain some clues to the budgetary outlook for science and technology.

As far as biomedical research is concerned, Ford asked Congress to cut \$112 million from his request for the National Institutes of Health for fiscal 1975, which began last July 1. Such a move, he said, would result in a 25-percent reduction in funds available for new grants and contracts, plus a 5-percent cut in continuing grants—which says something about the reception being given to complaints that good proposals at NIH have far outpaced the available money.

"The proposed savings," Ford said, "can be accomplished without seriously altering the momentum in biomedical research achieved by sustained and substantial growth in the National Institutes of Health in recent years." That statement should comfort those biomedical scientists who have been vociferously lamenting the fact that, aside from the politically sensitive cancer and heart and lung institutes, research at NIH has been hit hard by Nixon-inspired cutbacks in the past couple of years, so that spending power in most NIH institutes has been declining.

In any case, the day that Ford proposed the cut, Congress replied by tardily passing this year's HEW appropriations bill with a \$256-million increase over the budget request for NIH instead of a \$112-million decrease. Although it's clear that the battle is far from over, it's also certain the NIH's fiscal year 1976 budget will again be a political football, since the proposed cut in current funds is likely to be followed by an austere budget for 1976.

The cuts which Ford proposed for nuclear energy projects in FY 1975 are particularly noteworthy since they fall in some areas which have previously enjoyed the Administration's unswerving support. The breeder reactor program is perhaps the most prominent in this regard.

Ford proposed that some \$80 million in funds already appropriated by Congress for the Atomic Energy Commission should be spent in FY 1976 instead of FY 1975, the net effect being to stretch out several nuclear energy programs. He proposed that \$8 million earmarked for the demonstration fast breeder reactor be held over, which "would result in a delay in the pace of the project."

Similarly, he recommended that a total of \$21 million in funds earmarked for the fusion program be deferred — \$8 million of it until FY*1976 and \$13 million until the end of

(Continued on page 2)

In Brief

Rebuffed in his efforts to obtain support from the National Cancer Institute for studies of the effect that vitamin C might have on cancer, Linus Pauling, the Nobel laureate, privately stated his case last week to top officials of the Department of Health, Education, and Welfare. HEW Assistant Secretary for Health Charles C. Edwards, among others, is said to have responded sympathetically to Pauling's presentation, but NCI is so politically insulated that there's a question to whether any funds can be obtained for Pauling.

Meanwhile, NIH Director Robert Stone has been fired, as was widely forecast. Among those mentioned as a successor is Theodore Cooper, deputy to Edwards and former director of the National Heart and Lung Institute.

House Ways and Means has dropped a proposed tax revision that would have socked a lot of scientists in the pocketbook. Absent from the tax bill that it sent to the full house was a provision that would have set a \$200 floor on deductible miscellaneous expenses. The American Chemical Society, among others, had protested that the provision would have affected many members whose professional society dues, journal subscriptions, and other work-related expenditures do not come up to the \$200 figure.

Charles Hitch, who retires July 1 as president of the University of California, has been elected president of Resources for the Future, Washington-based research organization.

Continuing a program that it began in 1972, Harvard's Institute of Politics earlier this month held a week of briefings on Congressional "issues and processes" for newly elected Congressmen. Twelve members signed up for the course.

Behavior Modification Curbs Termed Inadequate

A three-year investigation by Senator Sam Ervin's constitutional rights subcommittee has concluded that a large amount of behavior-modification research is supported by the federal government without adequate protection of the rights of the people who get modified.

According to a 650-page report by staff members of the subcommittee, even the new regulations governing human experimentation funded by HEW don't offer adequate protection, and the situation is a good deal worse in many other federal agencies which are deep into behavior modification.

Furthermore, the much-publicized withdrawal of the Law Enforcement Assistance Administration (LEAA) from the support of biomedical and behavioral research hasn't resulted in cancellation of a single project six months after the announcement was made, the staff reported.

Behavior modification came to public notice three years ago, following reports of dubious practices in a number of federally supported research projects and widespread concern over the resurgence of psychosurgery as a therapeutic tool.

Ervin states in an introduction to the report that "the most serious threat posed by the technology of behavior modification is the power this technology gives one man to impose his views on another," and he adds that it is "all the more disturbing that few real efforts have been made to

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FY 1975. The effect of those delays would be to hold up the purchase of essential computer equipment and stretch out several key fusion experiments. Furthermore, he recommended that \$2 million slated for laser fusion be held over.

The message there is that since the breeder and the fusion programs will not contribute anything to short-term energy supplies, they may have slipped a little in the energy R&D pecking order. That suggestion is also borne out by the fact that, aside from a proposed \$5-million deferral of funds for solar and geothermal energy, no other energy R&D program would be squeezed by the proposed budget cuts.

Finally, NASA once again finds itself taking the brunt of science-related budget cuts. Ford has proposed that a total of \$72 million be held out of NASA's FY 1975 budget and spent in 1976. Of that money, \$20 million is earmarked for the joint US-USSR docking mission, and the effect would be to reduce contingency funds available to handle any unforseen snags. The rest of the cuts would be applied to a variety of space science programs, and would result in a number of launch delays.

The space shuttle has come out of the operation unscathed.

consider the basic issues of individual freedom involved, and to minimize fundamental conflicts between individual rights and behavior technology."

As a case in point, the report examines the newly established HEW regulations governing human experimentation, and finds them lacking because they provide virtually no mechanism for HEW to exercise any supervision.

In fact, the report lists a number of projects supported by the National Center for the Study of Crime and Delinquency—an agency of the Alcohol, Drug Abuse and Mental Health Administration—which "are so unproven as to raise the question of whether the federal government should be involved at all." Among them are studies attempting to link abnormal chromosome configurations with the prediction of violent behavior, projects involving electrical stimulation of the brain "in an effort to discover and neutralize neurological sources of violence," and a Florida-based drug rehabilitation program which one critic has described as employing Nazi-style methods.

Whether or not those charges are correct, one of the main accusations listed in the report is that HEW had a great deal of difficulty in answering a request from the committee for a list of the behavior-modification experiments it was supporting. It took HEW five months to gather the information together, a fact which the report suggests "indicates that the department is ill-equipped to provide the kind of monitoring and review in research situations that raise serious questions of privacy, freedom and self-determination."

The situation in other agencies is no better. Earlier this year, in response to prodding from Ervin's subcommittee, LEAA announced that it would no longer fund any biomedical or behavioral reserach because it lacked the capacity to monitor such experiments. A hasty computer search through LEAA's files at the time turned up 537 projects which dealt in some way with behavior modification.

But, in a letter to the subcommittee dated August 29, 1974, the agency said that 390 of those projects were terminated before the cutoff was announced, 110 were later found to involve no medical procedures, 35 involved only "routine" medical procedures, one "did not violate the February guideline." The agency is checking to see whether the remaining project should be continued.

All of which is rather puzzling since LEAA repeatedly stated in February that it would no longer support biomedical or behavioral research.

Whatever the validity of the report's conclusions, the document provides a valuable compendium of the federal government's official attitudes and regulations concerning some tricky ethical problems. Copies can be obtained from the Government Printing Office, Washington DC 20402 for \$5.35. Individual Rights and the Federal Role in Behavior Modification; stock number 5270-02620.

NIH Study Upholds Peer Review, But Suggests Changes

A committee of administrators at the National Institutes of Health has completed a long look at the peer review system, and, though recommending several changes, has, in effect, termed the system a sound means for dispensing research money.

The study, forwarded to NIH Director Robert Stone just a week before he was fired, was undertaken last spring by the NIH Executive Committee for Extra-Mural Affairs, which is made up of associate directors for extra-mural affairs from each of the institutes. Under the chairmanship of Thomas E. Malone, the NIH chief for extra-mural research and training, the committee held a series of workshops and seminars from which emerged a series of recommendations.

The just-completed study, which now awaits a new NIH Director, was undertaken last spring by the NIH Executive Committee for Extra-Mural Affairs, which is made up of associate directors for extra-mural affairs from each of the institutes. Under the chairmanship of Thomas E. Malone, the NIH chief for extra-mural

research and training, the committee held a series of workshops and seminars from which emerged a series of recommendations that were forwarded to Stone last week.

The central recommendation was that NIH should appoint another committee, which would be charged with examining a number of matters, among them: the peer review system's receptivity to new ideas, it often being alleged that review panels tend to favor proposals that harmonize with their own hypotheses; methods for swiftly informing disappointed applicants of the outcome of the panel deliberations so that they may amend the application or appeal the verdict; and improvement of communication among peer review groups to encourage uniform standards of review.

It was also suggested to Stone that NIH prepare a publication aimed at explaining to the scientific community and the public how the peer review system works and why its advocates believe it is the best-known method for making grant decisions.

GAO Report Criticizes Nuclear Plant Safeguards

While the Atomic Energy Commission has been busy strengthening regulations to protect weapons-grade nuclear materials against theft (SGR Vol. IV no. 20), the General Accounting Office has come up with a study which suggests that nuclear power plants are inadequately safeguarded against sabotage aimed at discharging large quantities of radioactive material into the environment.

Released last month by Senator Abraham Ribicoff (D-Conn.), the study is based on GAO's own examination of security arrangements in force at nine separate power plants. It turned up such deficiencies as "unlighted protected-area perimeters, unlocked outside doors, lack of intrusion alarms, and unarmed watchmen."

Although those inadequacies contravene present AEC regulations, the GAO study notes that even if security systems are properly installed, they "could not prevent a takeover for sabotage by a small number — as few, perhaps, as two or three — of armed individuals." The GAO goes on to note that "such a takeover, particularly of a nuclear power plant near a large metropolitan area, could threaten public health and safety, if radioactive materials were released to the environment as a result of successful sabotage."

There is considerable disagreement, however, within the nuclear industry on how vulnerable a nuclear power plant would be to sabotage, with some industry officials maintaining that a group of terrorists probably wouldn't pose much of a threat to public safety even if they did succeed in taking over a power plant.

Consequently, the AEC is itself sponsoring a series of studies aimed at determining the potential sources of sabotage threats, the vulnerability of reactors to sabotage, the resources necessary to carry out a successful sabotage, and the potential consequences. The studies are due to be completed by June 1975.

In any case, the GAO study notes that used fuel rods stored at reactor sites are more accessible and probably more vulnerable to sabotage than the reactor core itself, and that the quantity of spent fuel in storage at reactor sites is growing rapidly.

When fuel rods are removed from the reactor core, they are stored at the site in open water baths for several months to allow some of the shorter-lived radioactive material to decay, and ultimately they are shipped to reprocessing facilities where plutonium and unused uranium are extracted. But the problem is that since reprocessing facilities are not expected to be in operation until 1976 at the earliest, stocks of spent fuel rods are rapidly accumulating at reactor sites.

The GAO therefore suggests that the AEC should immediately consider imposing interim security measures to protect the spent fuel in storage at nuclear power plants.

The GAO's study follows by just over a year a similar investigation of security measures at three facilities where plutonium is stored, as a result of which the GAO concluded that some of the safeguards wouldn't pose much of a deterrent to an amateur burglar, let alone a well-trained terrorist group.

Was That Good or Bad News from FDA? Take Your Choice

Varying press treatment of a recent FDA proposal on regulating contaminants in food provides a neat case study of how a government decision can be made to look good or bad simply through the way it's: reported by the news media.

The objective heart of the matter was an FDA announcement on December 6, proposing limits for mercury in fish, lead in evaporated milk, and aflatoxin—a carcinogenic substance—in peanuts.

The New York *Times*, frequently a sucker for government handouts, reported the announcement under a headline, "3 Foods Face Curbs on Contaminants." The accompanying article began, "The Food and Drug Administration proposed today a set of food regulations designed to control the contamination of fish by mercury and reduce the contamination of evaporated milk by lead and of peanuts by cancer-causing substances called aflatoxins.

"All the contaminants are lethal. None can be eliminated from food. The new regulations would seek to keep the contamination to the lowest possible level without needlessly compromising major sources of food."

The *Times* article went on to report that FDA Commissioner Alexander Schmidt "called the proposals 'extremely important." Then it quoted various food

industry spokesman to the effect that their products are safe and easily fall within the newly proposed standards.

The Washington *Post*, which is more inclined to skepticism in dealing with government announcements, headlined its story, "FDA Decides It Can't Ban All Impurities."

The story began, "The Food and Drug Administration acknowledged yesterday that there is no way to get rid of all the 'poisonous and deleterious' substances in food and that there are limits to how much their levels can be reduced without disrupting the food supply."

The *Post* then went on to report that "The FDA position received a barrage of criticism from scientists and consumer spokesmen.

"Dr. Sidney Wolfe, of Public Citizens Health Research Group (a Nader affiliate), said setting any levels is 'unconscionable,' especially for aflatoxin—a mold he called 'one of the most potent carcinogens...known."

"Wolfe," the *Post* continued, "accused the FDA of 'measuring how much there is of one of these substances in a food and then setting the level a little higher to legitimize it."

The *Post* quoted the protests of consumer organization officials, but carried no comments from industry spokesmen. The *Times*, on the other hand, limited its report of comments to those from industry, and carried nothing concerning those opposed to the decision.

Letter to the Editor

Dear Sir:

"Oak Ridge Laboratory Staff Seeking Union-Type Association" (SGR Vol. IV, No. 20) does not provide an adequate perspective on the conditions in science and society in general, and at the Oak Ridge National Laboratory (ORNL) in particular, which have provided the impetus for the formation of the kind of professional staff association proposed. I do not believe that the ORNL staff has "disastrously low morale."

However, it is true that reductions, oscillations, and uncertainties in funding have kept the management and staff of ORNL and many other laboratories on the edge for a number of years. Recurring layoffs, inflation, and the apparent absence of a rational scientific research policy at the national level have caused morale to suffer among scientists throughout the country. We at ORNL are not unique in either the problems we face or in our search for mechanisms which might help to solve or at least minimize some of these problems. Various forms of professional staff organizations have existed for some time at a number of similar institutions, including the Argonne and Brookhaven National Laboratories and Bell Labs. More recently, such organizations have been formed at the Lawrence Livermore

Laboratory and the Knolls Atomic Power Laboratory as well as at ORNL and other places.

The article also contained a misprint which should be corrected. The letter proposing the formation of a professional staff association (PSA) at ORNL was not signed by 1112 ORNL employees, which would be a majority of the monthly staff, but by 112 staff members, or slightly more than five percent. PSA would have preferred your number of signatures, but it does not yet enjoy that kind of support from the staff.

Sincerely,

W. R. Garret
Interim Chairman, PSA
Oak Ridge National Laboratory
Oak Ridge, Tenn.

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European Science Foundation Takes Another Step

Remember the old joke about a coordinator being a guy who has a desk between two expediters?

Keep it in mind as we register the glacial progress of the 15-nation European Science Foundation, which, despite the similarity of title, bears scant relation to our NSF, the reason being that NSF has lots of money to dispense and ESF neither has any nor the prospect of getting much, if any.

Founded in 1973, following two to four decades of discussion, depending upon whose history one accepts, ESF came into being as a swift response by European learned societies to an effort by the Common Market bureaucracy to get a hold on some of the government research funds of the Market's members. (SGR Vol. III, No. 18). Alarmed at the prospect of some of their scare resources coming under the control of the wrangling Brussels bureaucrats, Britain's Royal Society and West German's Max Planck Society countered with a proposal for an organization that would extend beyond the Market to all of Europe. Eventually, they signed up 45 academies and research councils in 15 countries, following which they agreed to headquarter themselves at Strasbourg.

Last month, it was announced that Sir Bryan Flowers, a physicist who is rector of Imperial College, London, has been elected president and that the ESF will go into operation at the commencement of the New Year with a budget of about \$750,000 and a small, fulltime staff.

As for what it will do, that is yet to be determined, but Flowers has a list of projects for consideration by the ESF governing council. These include:

Serving as a coordinator of national astronomy programs, encouraging the pooling of equipment and other resources for archeological research, studies of systems, commenting on the state of large, European-wide research organizations (such as the European Space Research Organization), and, of course, studies of science policy.

With research budgets in Europe as tightly stretched as they are here, if not more so, there is no thought at present about ESF becoming a granting agency. Rather, ESF is envisaged, for a long time to come, as simply a forum for European nations to discuss, and if so inclined, coordinate, research programs.

EPA Unhappy With AEC's Nuclear Waste Disposal Program

Having recently criticized the AEC's fast-breeder reactor program and raised alarm in the nuclear industry by suggesting that several atomic power plants should be backfitted with cooling towers, the Environmental Protection Agency (EPA) has now turned its attention to the AEC's waste disposal program. That, too, was found to be lacking.

In a little-noticed appearance at public hearings on nuclear waste disposal held by the AEC last month, William Rowe, head of EPA's Office of Radiation Programs, called the disposal of reactor wastes "the major unresolved problem involving nuclear fission as an electrical energy source."

He warned that unless a permanent disposal method is found "in the reasonable future," the nuclear power program could be placed in jeopardy. The AEC's approach to the problem, he added, is neither properly planned nor adequately funded.

In September, the AEC published a draft environmental impact statement on its waste disposal program, at which time it also announced that is has selected three potential sites and three different designs for a temporary storage facility where solidified reactor wastes will be kept under surveillance until a permanent disposal site has been found.

Construction of temporary storage facilities is

necessary, the AEC said, because no permanent disposal site has yet been found and some means must be developed for handling the wastes produced by the nuclear power industry in the 1980s and beyond. In the meantime, the AEC says, it will continue searching for a suitable burial site, of which one or two are already under consideration in New Mexico.

But Rowe argued that there is a danger that the temporary storage facility may "for a variety of reasons, including economic, eventually become or be considered as an ultimate disposal facility for the waste it contains." He added that it is "highly unlikely" that any of the designs so far discussed would be acceptable as an ultimate disposal method.

Suggesting that the budget of \$2.5 million for studies of permanent disposal methods is inadequate, Rowe also argued that the AEC lacks a proper plan for finding a permanent burial site. He therefore called on the AEC to "set forth a program plan presenting alternatives, milestones, and funding options."

Rowe warned that "it would be difficult for (EPA) to consider anything less than this as acceptable" — an indication that unless the AEC complies with EPA's recommendations, it will get a rating of inadequate for its waste disposal impact statement, just as it did with its draft statement on the breeder program.

Evangelist Moon Takes up a Scientific Cause

Sun Myung Moon, the rabidly anti-communist evangelist from Korea whose support for Richard Nixon extended to prayers on the Capitol steps during the impeachment hearings and banners proclaiming that "God Loves Nixon," has directed his organizations talents to another lost cause — muddle-headed conferences on the vague theme of the unity of the sciences.

The third such event took place recently in London and according to reports in the British journals Nature and New Scientist, it was an extraordinary affair from start to finish, producing the suggestion from one speaker that criminals should be given a dose of radiation, and an exhortation from Moon himself for scientists to help bring about a "harmonious co-existence" between human beings and other creatures.

But even before the event got underway it ran into trouble. Invitations sent to a sheaf of eminent scientists asking them to take part made no mention of Moon's unconventional philosophies, and several of the advisers listed on the conference brochure were not very happy when they found out.

One prospective speaker, Nobel Laureate Salvador Luria, cancelled his trip to London when he heard Moon was behind the affair, telling the organizers in a telegram that he was particularly annoyed by "the secrecy of the disreputable sponsorship." And Lord Ashby, whose name also appeard on the program, told New Scientist that his association with the event was "entirely bogus," and that he had no intention of participating.

Be that as it may, the stated aim of the conference

was to "inspire and foster the emerging world culture and civilization" — an aim which was presumably little enhanced by a lecture given by Nobel Laureate A.J.P. Martin. He told the assembled participants that learned societies should nominate eminent individuals whose cells should be frozen and used for cloning, and that there's no reason why prisoners shouldn't be experimented upon.

In particular, Martin came up with the novel suggestion that criminals should be irradiated, the dose depending on the severity of the crime.

Previous conferences held by Moon's organization took place in New York and Tokyo, during which ideas of comparable novelty were put forward by some of the participants.

What is perhaps most interesting about these circuses is how, at the drop of an invitation, some of the leading lights of the scientific community bolt for the airport.

NAS to Hold Ethics Forum

Ethical and legal issues involved in biomedical experiments on human beings—with special emphasis on children, the poor, prisoners, and military personnel, as well as fetal research—will be publicly discussed in Washington on February 18-19 at an Academy Forum sponsored by the National Academy of Sciences.

Inquiries about the meeting should be addressed to M. Virginia Davis, Academy Forum, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

High-Vacuum Scholarship: Dept. of Substance and Shadows

The following is excerpted from the conclusion to an article, "The Substance and the Shadow," by Bernard M. Bass, graduate school of management, University of Rochester, as published in American Psychologist, December 1974.

What have I tried to say here? First, I think we need to delay locking ourselves prematurely into complex theorizing, defining, and hypothesis testing before we have adequately, fully, and openly looked at the problem to which we have addressed ourselves. This does not mean raw empiricism and rejection of theory. It means theory commensurate with where we are in the process of studying our problem.

Second, I think that as much as possible we need to look at real-world data for the source of our problems and to bring into the experiment data that we solidly connect to the real world. This will enable us to seek valid generalizations in real-world operations of what we can accomplish in controlled experimental settings.

Third, models and theories that do not yield tests of their revision hinder understanding of a problem more than they help.

Fourth, industrial/organizational psychologists should play a crucial role in advancing the science of psychology if they can straddle or work on teams that straddle from operations to laboratory in promoting the understanding of problems of human abilities, motivations, and interpersonal behavior.

Applied psychologists are men in the middle. Some of our colleagues in more general areas see us as soft, inexact, and muddleheaded; the laymen who "meet payrolls" with whom we must deal see us as hard but impractical, academic theoreticians grasping for the shadows rather than the substance. We need to learn how to do both.

In Print: A Perceptive New Book on Science and Politics

Advice and Dissent, Scientists in the Political Arena, by Joel Primack and Frank von Hippel (Basic Books, 299 pages, \$12.95).

This is both a depressing and inspiring account of scientists in public affairs, depressing because it documents how easily and often sound technical advice has been politically misrepresented and misused, and inspiring because it details how scientists working outside "the system" have frequently been effective in public affairs.

The main message is that, contrary to the insidious folklore of the federal advisory system, knowledge gained from being inside is neither so valuable nor otherwise unavailable as to be worth the usual price of being silent in public. As the authors, both academics and longtime observers of science and government, demonstrate in a series of case studies, the political process, as often as not, summons prestigious scientists to rubberstamp rather than to help make decisions. And not infrequently, political leaders resort to plain lies or obfuscation when they report to the public and Congress on what their advisers had to say.

As the authors point out, this happened repeatedly in connection with Administration efforts to sell the supersonic transport to Congress. Thus, when the SST Advisory Committee raised serious concerns about sonic boom and the dangers of ozone depletion, the Administration not only refused to make the report public, but actually sent one of its representatives to Congress to testify that:

"According to existing data and available evidence, there is no likelihood that SST operations would cause significant adverse effects on our atmosphere or environment. This is the considered opinion of the scientific authorities who have counseled the government on these matters over the past five years."

An example of evasion just short of lying occurred in 1971 when Deputy Secretary of Defense David Packard, testifying in behalf of the anti-ballistic missile, said that Wolfgang Panofsky, the high-energy physicist, was among the scientists he had consulted, the implication being that Panofsky, who was well-identified with arms control efforts, supported the ABM.

When Panofsky was summoned, he testified that the "consultation" took place when he and Packard "happened to accidentally meet at the airport." Panofsky then went on to tell his Congressional questioners that the ABM was "an

CORRECTION

A report in the last issue of SGR incorrectly identified one member of the FAS-sponsored delegation which investigated harrassment of physicians in Chile. The leader of the delegation was Leonard Sagan.

unwise decision from many points of view, from the point of view of sound engineering, judgment, economy, and stopping the arms race."

Having testified that many "outside consultants" were brought into the ABM deliberations, the Defense Department furnished a list that included the President's Science Advisory Committee (PSAC) and the Defense Science Board (DSB). Investigation revealed that PSAC was consulted three days after Nixon announced the decision to go ahead with ABM deployment, and that the DSB had not been consulted at all.

In contrast to these seedy episodes, the authors provide case studies in which scientists working outside of government have effectively used their professional talents to arouse public opinion and—as was usually the case—stop something that the government was trying to bulldoze through.

Among the cases cited are William A. Shurcliff's successful campaign against the SST. This drew considerable support from the efforts of Richard Garwin, of IBM, to go public with anti-SST arguments even though Garwin had chaired a White House study of the subject. The role of independent scientists in pesticides and radiation safety controversies is also well documented.

The passage of the Federal Advisory Committee Act and recent strengthening of the Freedom of Information Act may inspire some complacency about the difficulties that government now faces in trying to repeat some of the deceptions cited above. However, there should be no complacency. Neither of these laws can instill honesty or regard for the public interest where none exists. Rather, they are simply tools, which, when skillfully used by alert citizens, make it possible to detect deception and to lay out on the public record what's going on inside government.

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Dixy Lee Ray Says She Terminated Lying By AEC

With a bit of pique detectable between the lines, AEC Chairperson Dixy Lee Ray has come close to asserting that not she, but past-Chairman Glenn Seaborg, is responsible for the policies of information concealment that have lately brought opprobrium upon the Commission.

"In recent days," she says in a statement issued recently by the AEC, "efforts have been made to portray the the Atomic Energy Commission as an agency that supresses information on the safety of nuclear power plants," a reference to a newly released 10-year old study of the hypothetical consequences of a major accident at a nuclear power plant.

"While there may be some validity for such accusations in the past," she declares, "the situation has changed today. There has been an unprecendented effort, especially during the past two years (i.e., since she became Chairperson) to provide the public with full documentation on all questions of nuclear power plant safety."

Ray's statement goes on to cite the deluge of previously withheld documents that have lately been made public. Among them are the accident study, produced during Seaborg's 1961-71 tenure, when a poppa-knows-best attitude prevailed at the AEC.

As for Seaborg, who departed just when the anti-nuclear movement began to flourish, he told the New York Times, in regard to that report, "We didn't want to publish it because we thought it would be misunderstood by the public."

Without specific reference to her predecessor, Ray cited "the openness that characterizes the AEC today," and went on to state that "Public disclosure is a policy that we not only preach; we practice it every day."

Apart from the AEC's discretionary attitude toward telling the truth, it should be noted that the newly

strengthened Freedom of Information Act, which Congress has just overwhelmingly passed over President Ford's veto, will require the AEC and its recently created successors, the Energy Research and Development Administration and the Nuclear Regulatory Commission, to perform out in the open. Under the newly amended act, there is little room left for concealment.

The key arena in the safety controversy will, of course, be the Nuclear Regulatory Commission, which, as independent agency, inherits the AEC's safety and licensing functions (SGR, Vol. Iv, No. 20). For the record, it should be noted that Chairman-designate William A. Anders has publicly pledged "the maintenance of an open regulatory process." In a speech Nov. 14 to the American Geographical Society, Anders — who is now on the AEC — said, "Openness is essential, in my view, to establishing and maintaining the credibility" of the new commission.

NAS Says A-Ships Uneconomical

While a Japanese nuclear ship recently was drifting around the Pacific with its leaking reactor stuffed with socks and without a port to call in, a committee of the National Academy of Sciences coincidentally concluded that nuclear merchant ships can't compete economically with conventional vessels anyway. It also warned that it's impossible to predict the consequences of an accident with a nuclear powered ship, and suggested that international regulations be established, since there are likely to be some vessels operating anyway. Copies of the report Nuclear Merchant Ships are available from the NAS, 2101 Constitution Ave, Washington DC 20418 for \$6.75.

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